

Please amend claims 1-25 as indicated in the following complete listing of the claims that replaces all prior listings:

1. (Currently Amended) A filter element wherein fluid being treated by the filter element flows in a radial outward direction through the filter element, comprising:

a fluid permeable core element defining a central core element flow channel through the filter element;

a fluid permeable ion exchange resin layer disposed about the core element and adapted to remove mineral and organic acids from fluid passing through the filter element; and

a pleated filter media disposed about the ion exchange resin layer and core element downstream of the ion exchange resin layer.

2. (Currently Amended) The filter element of claim 1, further comprising first and second fluid permeable separation layers sandwiching the ion exchange resin layer there between, wherein the pleated media is structured to remove particulate and water from the fluid being treated, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the fluid being treated.

3. (Currently Amended) The filter element of claim 2, wherein the first separation layer is disposed immediately about the core element and the second separation layer is disposed between the ion exchange resin layer and the pleated filter media, and wherein the fluid treated is synthetic hydraulic fluid and the ion exchange resin layer is configured to remove acid from the synthetic hydraulic fluid.

4. (Currently Amended) The filter element of claim 2, wherein the first and second separation layers are made of a material selected from the group consisting of glass, cellulose, spun-bonded nylon, and polyester, and wherein the fluid treated is synthetic

hydraulic fluid and the ion exchange resin layer is configured to remove acid from the synthetic hydraulic fluid.

5. (Currently Amended) The filter element of claim 1, further comprising a fluid permeable outer casing disposed about the core element, ion exchange resin layer, and pleated filter media, wherein the pleated media is structured to remove particulate and water from the fluid being treated.

6. (Currently Amended) The filter element of claim 5, wherein the core element and outer casing comprise perforated metal or ceramic material, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the fluid being treated.

7. (Currently Amended) The filter element of claim 1, wherein the pleated filter media is co-pleated with a wire mesh, wherein the pleated media is structured to remove particulate and water from the fluid being treated.

8. (Currently Amended) A filter element wherein fluid being treated by the filter element flows in a radial inward direction through the filter element, comprising:

a fluid permeable core element defining a central core element flow channel through the filter element;

a pleated filter media disposed about the core element; and

a fluid permeable ion exchange resin layer disposed about the core element and pleated filter media and adapted to remove mineral and organic acids from fluid passing through the filter element, the ion exchange resin layer upstream of the pleated filter media relative to the direction of flow of the fluid being treated through the filter.

9. (Currently Amended) The filter element of claim 8, further comprising first and second fluid permeable separation layers sandwiching the ion exchange resin layer there between, wherein the pleated media is structured to remove particulate and water from the fluid being treated.

10. (Currently Amended) The filter element of claim 9, wherein the first separation layer is disposed immediately about the pleated filter media and the second separation layer is disposed immediately about the ion exchange resin layer, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the fluid being treated.

11. (Currently Amended) The filter element of claim 9, wherein the first and second separation layers are made of a material selected from the group consisting of glass, cellulose, spun-bonded nylon, and polyester, and wherein the fluid treated is synthetic hydraulic fluid and the ion exchange resin layer is configured to remove acid from the synthetic hydraulic fluid.

12. (Currently Amended) The filter element of claim 8, further comprising a fluid permeable outer casing disposed about the core element, pleated filter media, and ion exchange resin layer, wherein the pleated media is structured to remove particulate and water from the fluid being treated.

13. (Currently Amended) The filter element of claim 12, wherein the core element and outer casing comprise perforated metal or ceramic material, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the fluid being treated.

14. (Currently Amended) A filter assembly for filtering lubricant fluid flow in turbomachinery, comprising:

a cylindrical housing, the housing connected to the lubricant fluid of the adapted for fluid connection to a turbomachine; and

a filter element disposed within the housing and adapted to filter the lubricant fluid passing to the turbomachine, the filter element comprising:

a fluid permeable core element defining a central core element flow channel through the filter element;

a fluid permeable ion exchange resin layer disposed about the core element and adapted to remove mineral and organic acids from the lubricant fluid passing through the filter element; and

a pleated filter media disposed about the ion exchange resin layer and core element.

15. (Currently Amended) The filter assembly of claim 14, further comprising first and second fluid permeable separation layers sandwiching the ion exchange resin layer there between, wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the lubricant fluid.

16. (Currently Amended) The filter assembly of claim 15, wherein the first separation layer is disposed immediately about the core element and the second separation layer is disposed between the ion exchange resin layer and the pleated filter media, and wherein the ion exchange resin layer is configured to remove acid from synthetic hydraulic fluid.

17. (Currently Amended) The filter assembly of claim 15, wherein the first and second separation layers are made of a material selected from the group consisting of glass, cellulose, spun-bonded nylon, and polyester, wherein the pleated media is structured to remove particulate and water from the lubricant fluid and wherein the ion exchange resin layer is upstream of the pleated filter media.

18. (Currently Amended) The filter assembly of claim 14, further comprising a fluid permeable outer casing disposed about the core element, ion exchange resin layer, and pleated filter media, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the lubricant fluid.

19. (Currently Amended) The filter assembly of claim 18, wherein the core element and

outer casing comprise perforated metal or ceramic material, and wherein the ion exchange resin layer is upstream of the pleated filter media.

20. (Currently Amended) The filter assembly of claim 14, wherein the pleated filter media is co-pleated with a wire mesh and is structured to remove particulate and water from the lubricant fluid.

21. (Currently Amended) A filter assembly for filtering lubricant fluid flow in turbomachinery, comprising:

a cylindrical housing, the housing connected to the lubricant fluid of the adapted for fluid connection to a turbomachine; and

a filter element disposed within the housing and adapted to filter lubricant fluid passing to the turbomachine, the filter element comprising:

a fluid permeable core element defining a core element flow channel through the filter element;

a pleated filter media disposed about the core element; and

a fluid permeable ion exchange resin layer disposed about the core element and pleated filter media and adapted to remove mineral and organic acids from the lubricant fluid passing through the filter element.

22. (Currently Amended) The filter assembly of claim 21, further comprising first and second fluid permeable separation layers sandwiching the ion exchange resin layer there between, and wherein the ion exchange resin layer is upstream of the pleated filter media.

23. (Currently Amended) The filter assembly of claim 22, wherein the first separation layer is disposed immediately about the pleated filter media and the second separation layer is disposed immediately about the ion exchange resin layer and the pleated media is structured to remove particulate and water from the lubricant fluid.

24. (Currently Amended) The filter assembly of claim 22, wherein the first and second separation layers are made of a material selected from the group consisting of glass,

cellulose, spun-bonded nylon, and polyester, and wherein the ion exchange resin layer is configured to remove acid from synthetic hydraulic fluid.

25. (Currently Amended) The filter assembly of claim 21, further comprising a fluid permeable outer casing disposed about the core element, pleated filter media, and ion exchange resin layer, and wherein the ion exchange resin layer is constructed to remove at least one of HCl, HBr, HF, HI, H₂SO₄, H₃PO₄, acetic, formic, propionic and benzoic acid from the lubricant fluid.